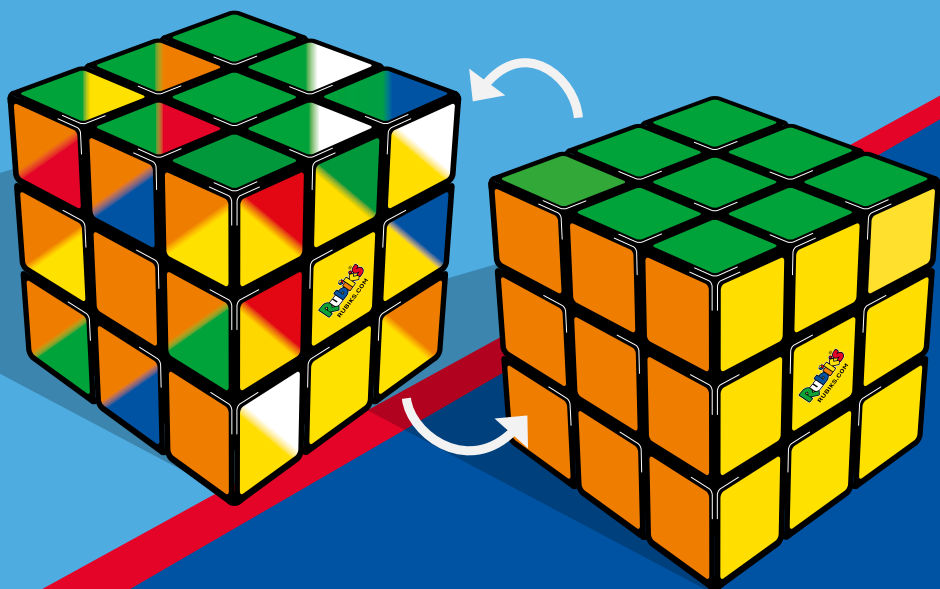




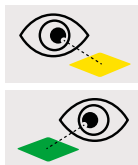
YOU CAN DO THE RUBIK'S IMPOSSIBLE

Hints and Tips



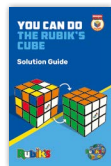
WHAT IS THE RUBIK'S IMPOSSIBLE?

The Rubik's Impossible is a Rubik's Cube made with lenticular tiles. Lenticular tiles are comprised of two colors and the visible color is determined by the viewing angle.



HOW TO USE THIS GUIDE

- This guide offers hints and tips to help you solve the Rubik's Impossible using the same layered method used to solve the Rubik's Cube, with a few additional algorithms. If you do not know how to solve the Rubik's Cube, see the Solution Guide on: www.YouCanDoTheCube.com and learn to solve the Rubik's Cube before you conquer the Rubik's Impossible.
- Throughout the guide you will see this symbol to indicate helpful tips. Take the time to read the tips closely.
- The gray areas on the Rubik's Impossible mean that at the stage you are working on, the color of the gray pieces doesn't matter.



TIPS FOR SUCCESS

- Examine your Rubik's Impossible carefully before scrambling it.
- Take your time and be patient.
- You may find that because the Rubik's Impossible is a visual challenge, some of the algorithms you have memorized to solve the Rubik's Cube may not be top of mind. So keep our Rubik's Cube solution guide handy on www.YouCanDoTheCube.com
- Be sure your hands are clean to minimize smudges.
- Being in a well-lit environment makes it easier to identify the colors.
- Holding the Rubik's Impossible farther away – arm's length – could help seeing the colors "transition".
- Use small sticky notes to keep track of pieces you are looking to move.

GET TO KNOW YOUR RUBIK'S IMPOSSIBLE

SOLVED STATE

Your Rubik's Impossible comes in its solved state.

SOLVED REFERENCE GUIDE

Cut out the solved Rubik's Impossible grid on **page 5** to refer back to once your Rubik's Impossible is scrambled.

CENTER PIECES

The center pieces, like the original Rubik's Cube, do not change color and are fixed to the internal core.

DOMINANT TILE COLOR

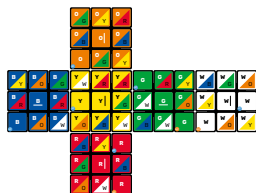
Each tile has a dominant color. They're the same face colors as the original Rubik's Cube. When correctly solved, each tile's dominant color will be the color of its center piece when viewed at the same angle.

SECONDARY TILE COLOR

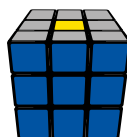
Most tiles also have a secondary color. You can see these colors as you rotate the Rubik's Impossible. The Transition Angle is the angle of view when the tile switches color. **Tiles with the same dominant color will transition at the same transition angle.** Each solved face has a different transition point.

LETTER COLOR KEY

In this guide the dominant and secondary colors of each tile are represented with their color letter initial on the reference grid.



Center pieces



Dominant color



BLUE
FACE

Dominant color



BLUE
FACE

Transition color

W = WHITE

B = BLUE

O = ORANGE

Y = YELLOW

G = GREEN

R = RED

GET TO KNOW YOUR RUBIK'S IMPOSSIBLE

TILE COLOR REFERENCE

To show the two possible colors on each tile, the dominant color is the bold letter in the top left corner and the secondary color is the letter in the bottom right corner. The dominant color is outlined around each tile.



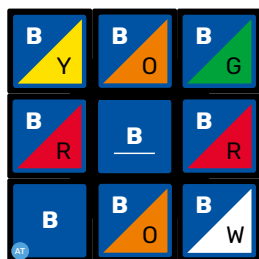
B = Dominant
Y = Secondary



R = Dominant
G = Secondary

RUBIK'S IMPOSSIBLE GRID

When correctly solved, the grid opposite can be held at an angle so **ALL** tiles are **BLUE**, the dominant solved color. When the face is tilted, the tiles will transition to the secondary colors shown by the letter other than "B" located in the lower right corner of each tile. If there is only one letter and color on the tile, that tile is an **Anchor Tile (AT)**. Anchor Tiles are explained on page 3.



Anchor Tile



Anchor Corner

Anchor Tiles (AT) and **Anchor Corners (AC)** on the grid are shown by colored circles in the bottom left of their tile.

TILE LINES

Notice that each tile has lines or ridges which you can feel with your fingernail. The lines on the center pieces of the grid indicate the orientation of the tile lines of every tile on each face when correctly solved. The lines help determine if pieces **AROUND** the center piece are correctly placed.

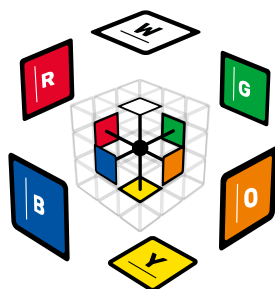
If the tile lines on the center piece are correctly oriented but the tile lines on another piece on that face do not match the center line orientation, then that piece is **NOT** correctly placed.



Tile ridges



Line indicates direction of ridges



ANCHOR TILES

Anchor Tiles are tiles that do **NOT** transition in color and are therefore **ONLY ONE COLOR**. These tiles are shown with **ONE COLOR** and **ONE INITIAL**.



B = **BLUE**

CENTER PIECES

All **CENTER pieces** are Anchor Tiles and just like a standard Rubik's Cube, the relationship between the center pieces does not change.

WHITE opposite YELLOW
BLUE opposite **GREEN**
ORANGE opposite **RED**

ANCHOR CORNER (AC)

There is only **ONE** Anchor Corner.
 This is **RED**, **GREEN** and **WHITE**.



= AC

ANCHOR TILES (AT)

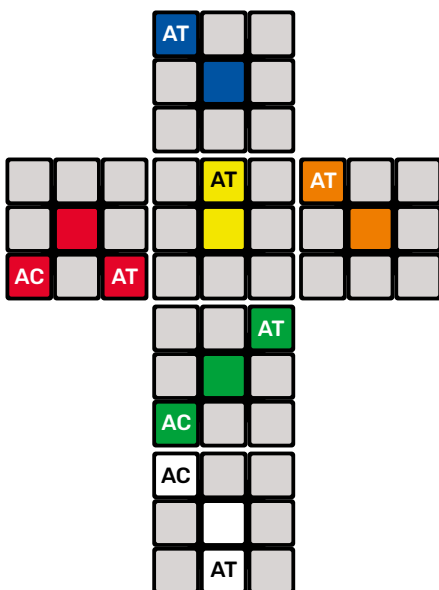
There are **SIX** Anchor Tiles that match the center piece when correctly solved.



= AT

AC = ANCHOR CORNER

AT = ANCHOR TILE



GET TO KNOW YOUR RUBIK'S IMPOSSIBLE

AMBIGUOUS PIECES

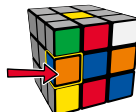
There are **THREE** ambiguous pieces on the Rubik's Impossible. Ambiguous pieces are edges that share the same transition tile colors.

- There is **ONE** edge **1** that is **ORANGE/BLUE** or **BLUE/ORANGE**.
- There are **TWO** edges **2** **3** that share the same **FOUR** colors. Each contains a **RED/GREEN** tile and a **BLUE/ORANGE** tile.

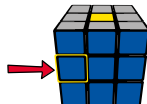


YOU DETERMINE AN AMBIGUOUS PIECES DOMINANT COLOR BY ITS TRANSITION ANGLE:

The ambiguous piece will transition from its secondary color to its dominant color at the same angle as the other solved tiles.



Secondary colors

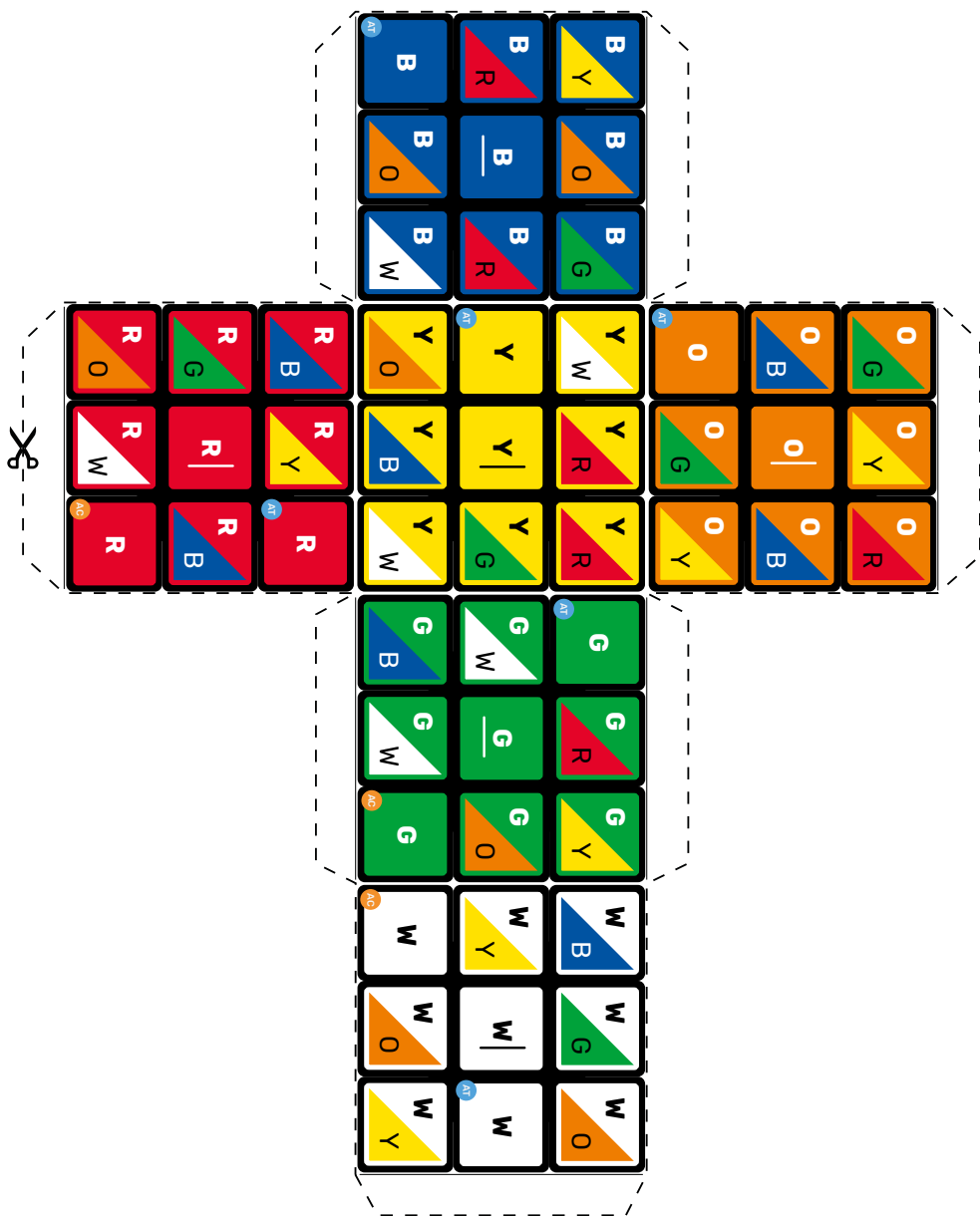


Dominant color

RUBIK'S IMPOSSIBLE SOLVED REFERENCE GRID

Cut out the solved Rubik's Impossible reference grid on **page 5** and fold/glue the solved paper Rubik's Impossible to refer back to. You can also download this reference grid from www.YouCanDoTheCube.com

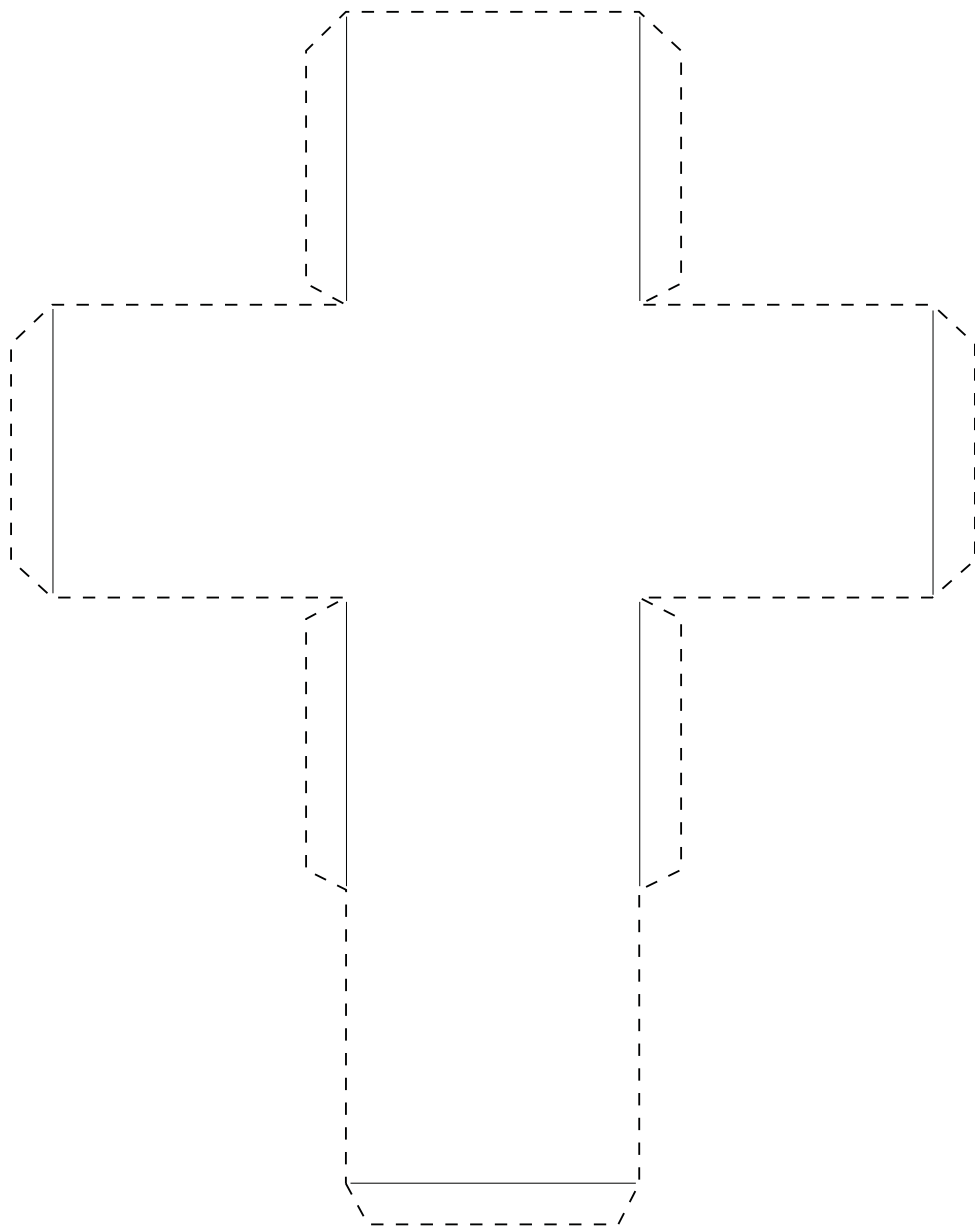
RUBIK'S IMPOSSIBLE SOLVED REFERENCE GRID



GET TO KNOW YOUR RUBIK'S CUBE

RUBIK'S IMPOSSIBLE SOLVED REFERENCE GRID

Cut out the solved Rubik's Impossible reference grid on **page 5**.



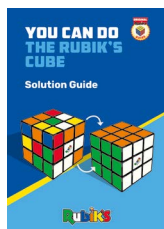
LAYER ONE



MAKE SURE YOU HAVE THE RUBIK'S CUBE GUIDE HANDY

The Rubik's Impossible is a different challenge to the Rubik's Cube so it's handy to have a little reminder of some of your memorized algorithms.

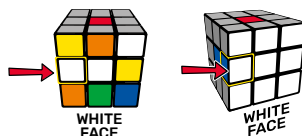
For the complete guide on how to solve the Rubik's Cube using the layered method, download our solution guide on: www.YouCanDoTheCube.com



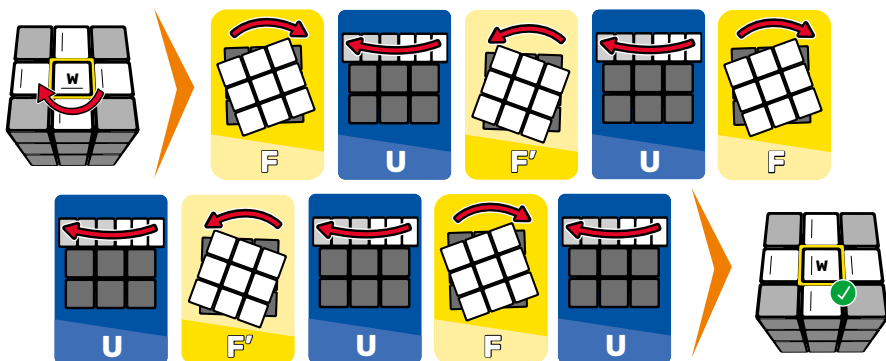
Creating the white cross

Try solving the **WHITE** face first using the layered method. We recommend starting with the **WHITE** face because there are **TWO** Anchor Tiles and none of the **THREE** ambiguous pieces.

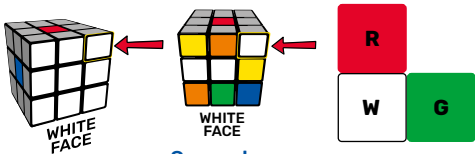
- The **WHITE** cross contains an Anchor Edge Tile.



After solving the **WHITE** cross and **BEFORE** placing the **WHITE** corners, make sure the **TILE LINES** on the **WHITE** center matches the **WHITE** edges. If it doesn't, follow the algorithm below holding the **WHITE** cross on the up face.

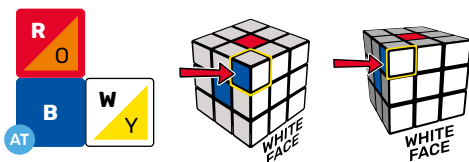


■ One of the WHITE corners is the **ANCHOR CORNER**.



Secondary colors

- Another **WHITE** corner contains a **BLUE ANCHOR TILE**.



When your Rubik's Impossible matches the grid above you can move to the next stage!



HOLDING YOUR RUBIK'S IMPOSSIBLE

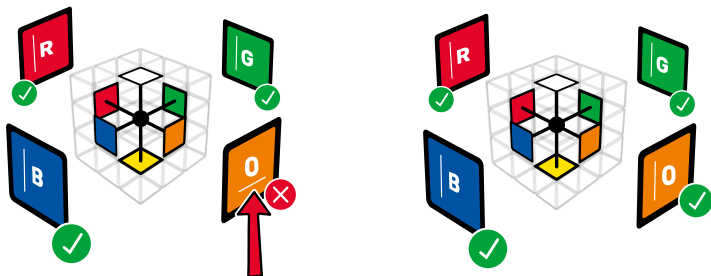
Hold your Rubik's Impossible with the **WHITE** on the **UP (U)** face.

UP FACE

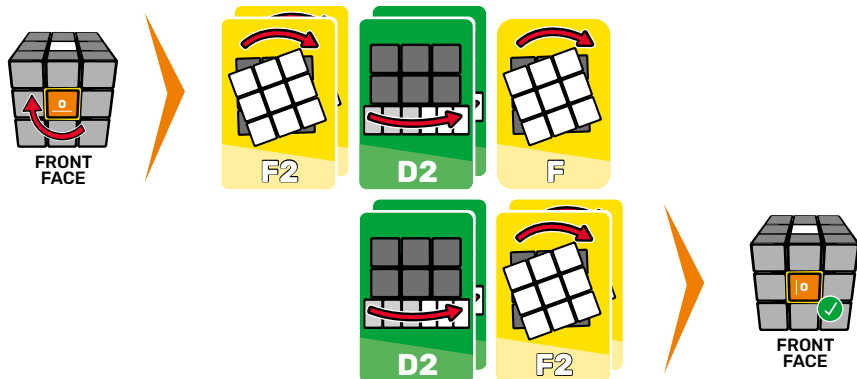


Orient the center tile lines

BEFORE flipping the cube over, orient the tile lines on the four centers of the middle layer.



If there is a center that is not oriented the right way, holding the center that needs to be reoriented on the **FRONT FACE**, follow the algorithm below. Do this for each center in the middle layer that needs to be oriented.



MIDDLE LAYER

HOLDING YOUR RUBIK'S IMPOSSIBLE

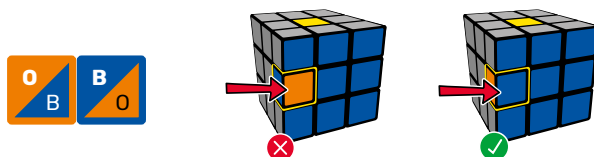
Hold your Rubik's Impossible with the **YELLOW** on the **UP (U)** face.



Solving the middle layer

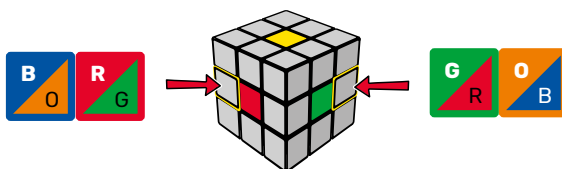
When solving the middle layer **watch out for the ambiguous edges**.

- The **BLUE/ORANGE** edge pieces secondary colors are also **BLUE** and **ORANGE**. So, after placing the piece, if the dominant colors do not have the same transition angle, then the piece needs to be removed and placed back in the other way.

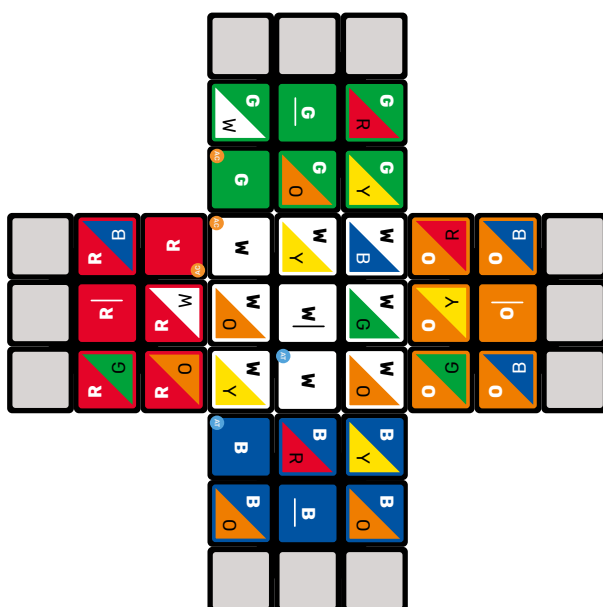


Transition to dominant color

- The edge piece that goes between the **BLUE** and **RED** centers, and the edge piece that goes between the **GREEN** and **ORANGE** centers have the same transition colors. So, after placing one of these edges, if the dominant colors do not have the same transition angle, then that edge goes in the other location.



Color reference - middle layer



When your Rubik's Impossible looks like the picture here, you have solved the middle layer and you can now solve the final layer!

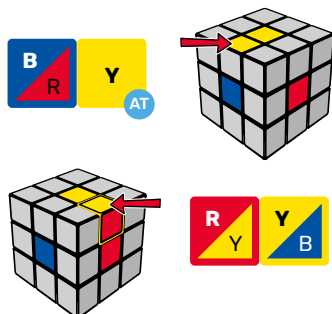


FINAL LAYER

Solving the yellow cross

When orienting the **YELLOW** cross:

- One of the edges has a **YELLOW** Anchor Tile.
- Another edge contains **YELLOW** on both of its tiles.



YELLOW CENTER TILE LINES

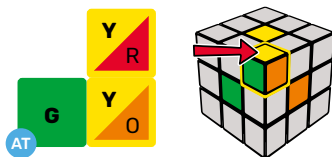
If the other five centers were already correctly oriented, then the **YELLOW** center will automatically orient.



Solving the yellow corners

When orienting the **YELLOW** corners, one of the corners contains two **YELLOW**s.

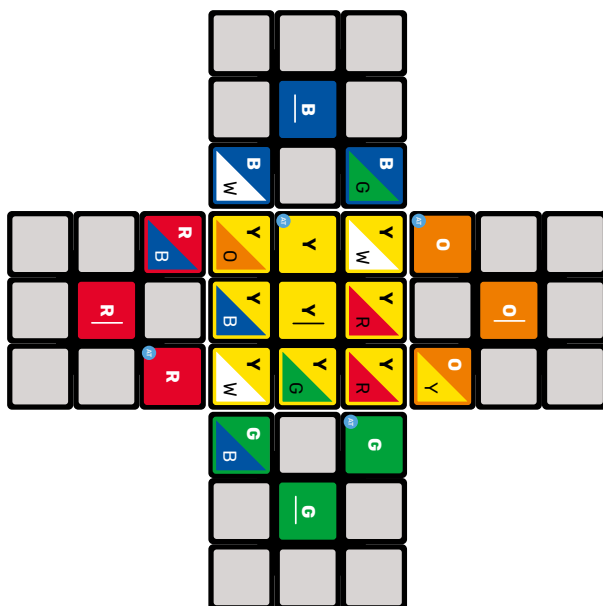
When correctly placed the **YELLOW/RED** tile will be on the **YELLOW** face.



ANCHOR TILES

There are **THREE** different Anchor Tiles on **THREE** different **YELLOW** corners: **GREEN**, **RED** and **ORANGE**. Use these Anchor Tiles as a positioning reference.

Color reference - yellow face & corners



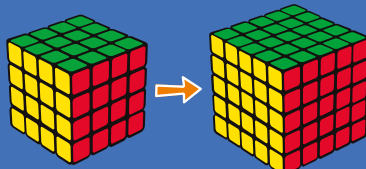
YELLOW EDGES

At this stage your **YELLOW** edges may be in a different location than the color reference above. You will need to orient these pieces in the final step.

You've solved the yellow face & corners! Only a few more moves to solve the Rubik's Impossible. **We'll let you take it from here.**



TRY A DIFFERENT CHALLENGE



**RUBIK'S
MASTER**

**RUBIK'S
PROFESSOR**

Available at: **RUBIKS.COM**



More resources available on [YouCanDoTheCube.com](https://www.youcandothecube.com)

Videos for each stage / solution checklist / songs and chants / teacher guides

www.youcandothecube.com/educators/teach-to-solve/



RUBIK'S TM & © Spin Master Toys UK Limited, used under license. All rights reserved.